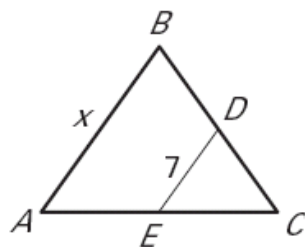


# TARGET 5A

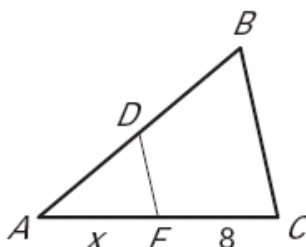
Name \_\_\_\_\_ Date \_\_\_\_\_

$\overline{DE}$  is a midsegment of  $\triangle ABC$ . Find the value of  $x$ .

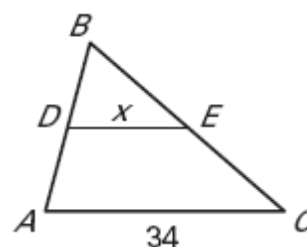
1.



2.



3.

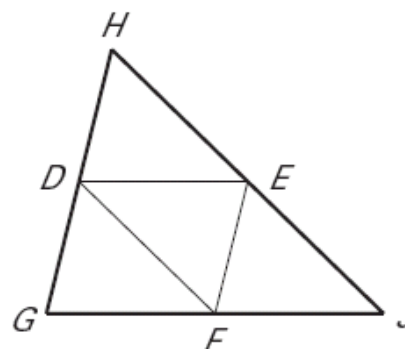


Use  $\triangle GHJ$ , where  $D$ ,  $E$ , and  $F$  are midpoints of the sides.

4. If  $DE = 4x + 5$  and  $GJ = 3x + 25$ , what is  $DE$ ?

5. If  $EF = 2x + 7$  and  $GH = 5x - 1$ , what is  $EF$ ?

6. If  $HJ = 8x - 2$  and  $DF = 2x + 11$ , what is  $HJ$ ?



In  $\triangle JKL$ ,  $\overline{JR} \cong \overline{RK}$ ,  $\overline{KS} \cong \overline{SL}$ , and  $\overline{JT} \cong \overline{TL}$ . Copy and complete the statement

7.  $\overline{RS} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$

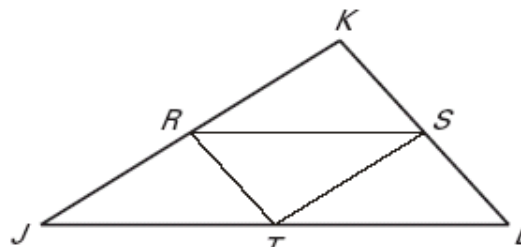
8.  $\overline{ST} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$

9.  $\overline{KL} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$

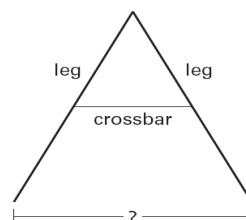
10.  $\overline{SL} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ? \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$

11.  $\overline{JR} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ? \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$

12.  $\overline{JT} \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ? \cong \underline{\hspace{1cm}} \underline{\hspace{1cm}} ?$



13. **Swing Set** You are assembling the frame for a swing set. The horizontal crossbars in the kit you purchased are each 36 inches long. You attach the crossbars at the midpoints of the legs. At each end of the frame, how far apart will the bottoms of the legs be when the frame is assembled? *Explain.*



## TARGET 5A ANSWERS

1. 14
2. 8
3. 17
4. 17
5. 37
6. 46
7.  $\overline{JL}$
8.  $\overline{JK}$
9.  $\overline{RT}$
10.  $\overline{KS}, \overline{RT}$
11.  $\overline{KR}, \overline{ST}$
12.  $\overline{LT}, \overline{RS}$
13. 72 in.; The crossbar is the midsegment of the legs